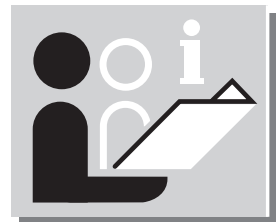
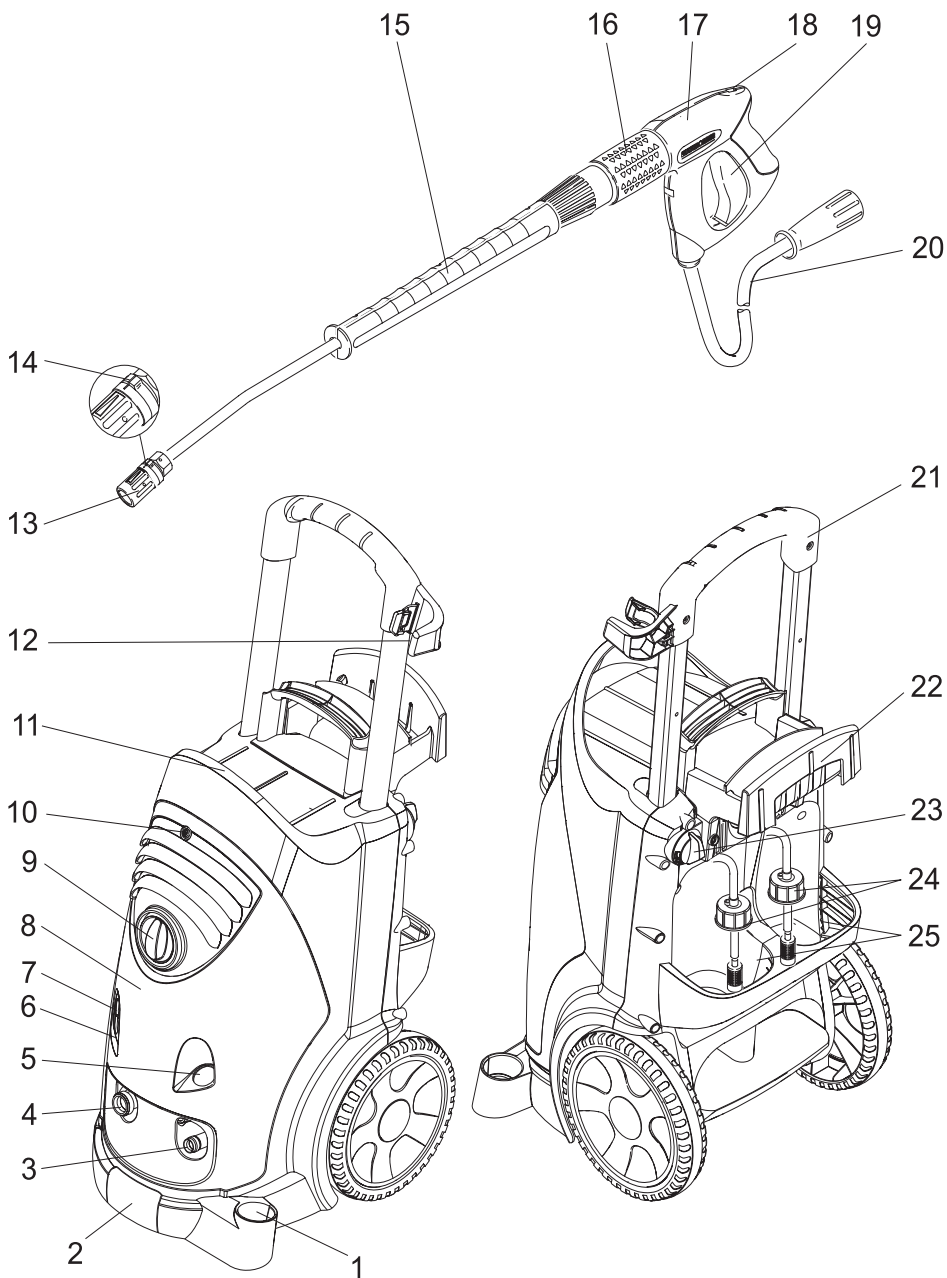


HD 6/13-4 M
HD 7/10-4 M







Please read and comply with these instructions prior to the initial operation of your appliance. Retain these operating instructions for future reference or for subsequent possessors.

Unit components

Please fold out illustration page at the front

- 1 Nozzle rest
- 2 Handle
- 3 High-pressure outlet
- 4 Water connection
- 5 Manometer
- 6 Oil level display
- 7 Oil reservoir
- 8 Hood
- 9 Unit switch
- 10 Fastening screw for hood
- 11 Hose rest
- 12 Handgun support
- 13 Nozzle
- 14 Marking of the nozzle
- 15 Spray lance
- 16 Pressure/flow control
- 17 Hand-held spray gun
- 18 Safety catch of hand-held spray gun
- 19 Lever of hand-held spray gun
- 20 High-pressure hose
- 21 Push-handle
- 22 Cable holder
- 23 Detergent metering valve
- 24 Detergent suction hose with filter and screw cap
- 25 Bottle holder for detergent

For your safety

Before you use the cleaner for the first time, read these operating instructions and take special note of the accompanying booklet "Safety Instructions for High-Pressure Cleaners" No. 5.951-949.

Symbols on the machine



High-pressure jets can be dangerous if improperly used. The jet must not be directed at persons, animals, live electrical equipment or at the appliance itself.



The appliance is not suited for use in the drinking water supply network. It is necessary to install a suitable system separator from Kaercher, if the device is to be used in the drinking water supply network.

Use of the cleaner

Use this unit exclusively for

- cleaning with high-pressure jet and detergent (e.g. cleaning of machines, vehicles, buildings, tools),
- cleaning with high-pressure jet without detergent (e.g. cleaning facades, terraces, gardening equipment).

For stubborn dirt we recommend the dirt blaster as an optional accessory (for HD ... Plus included in the delivery).

Safety features

Overflow valve with pressure switch

On reducing the flow rate with the pressure and flow control, the relief valve opens and part of the water runs back to the suction side of the pump.

If the lever of the hand-held spray gun is released, the pressure switch switches the pump off. If the lever is retracted, the pressure switch switches the pump on again.



Safety valve

The safety valve opens when the admissible operating excess pressure is exceeded; the water flows back to the pump suction side.

Overflow valve, pressure switch and safety valve are present in the factory and are sealed.

Adjustments are made only by Customer Service.

Protection of the environment, disposal

	<p>The packaging material can be recycled. Please do not place the packaging into the ordinary refuse for disposal, but arrange for the proper recycling.</p>
	<p>Old appliances contain valuable materials that can be recycled. Please arrange for the proper recycling of old appliances. Batteries, oil, and similar substances must not enter the environment. Please dispose of your old appliances using appropriate collection systems.</p>

Preparing the unit for use

Unpack the unit

- When unpacking the unit, check the contents of the packaging. If there has been any damage in transit inform the dealer.
- Do not dispose of the packaging with the household rubbish, hand it in at the appropriate collection point for recycling.

Check the oil level

- Read the oil level displayed while unit is at a standstill. The oil level must be above the two indicators.

Activate the oil reservoir vent


- Unscrew the fastening screw of the hood and remove the hood.
- Cut off the tip on the cover to the oil reservoir.
- Fasten the unit cover.


Mount the accessories

- Mount nozzle on the spray lance (see markings on the top of the setting ring).
- Fit the spray lance to the hand-held spray gun with pressure and flow control.
- Screw on high-pressure hose to the high-pressure outlet.

Switching on the unit

Electrical connection

 **Caution!** *The appliance may only be connected to alternating current. The voltage must correspond with the type plate on the appliance.*

 **Caution!** *Use if required an extension cable with sufficient cable cross-section (refer technical details) and always fully unroll the cable from the cable drum.*

Unsuitable extension cables can be hazardous. Only use extension cables outdoors which have been approved for this purpose and labelled with a sufficient cable cross section:

For connected loads see model rating plate/ Technical Specifications.



Caution!

It is essential that the unit is connected to the power supply by means of a plug. An inseparable connection to the power supply is prohibited. The plug is used to disconnect from the mains.

Check the power cord with mains plug for damage before every use. If the power cord is damaged, please arrange immediately for the exchange by an authorized customer service or a skilled electrician.

The appliance may only be connected to an electrical supply which has been installed in accordance with IEC 60364.

The minimum fuse rating required at the socket outlet is (see technical specifications).

The plug and coupling of the extension cable used must be watertight.

Water connection/Suction feed operation

Connection to water main



Caution!

Pay attention to the regulations of the water supply company; according to DIN 1988, the unit may not be connected direct to the public drinking water supply. A short-term connection via a non-return valve (Order no. 6.412-578) is allowed.

For connected loads see Technical Specifications.

- Connect a supply hose (not supplied) to the water outlet on the unit and to the water inlet (e.g. water tap).
- Open water inlet.

Suctioning water from an open container

- Screw on the suction hose (order no. 4.440-270) on the water connection.
- Attach the filter (order no. 4.730-012) at the suction hose.
- Vent the unit before using.
- To evacuate air from the unit, unscrew the nozzle and leave the unit running until water exits with no air bubbles. If necessary allow unit to continue running for 10 seconds and then switch off. Repeat this procedure several times.
- Switch off the unit and screw the nozzle back on.

Operating the unit



Danger!

Observe the relative safety regulations when using the unit at filling stations or other high-risk areas.



Caution!

Only clean engines in places which have appropriate oil separators (protection of the environment).



Caution!

The jet must not be directed at other persons or directed by the user at him/herself to clean clothing or footwear.

Only wash animals with the low-pressure fan jet (see "Selecting the type of spray").

Operating with high pressure




The unit is equipped with a pressure switch. The motor only starts up when the lever is retracted.

- Set the unit switch to "I".
- Unlock the hand-held spray gun and retract the lever of the gun.
- Adjust operating pressure and flow rate (+/-) by rotating the pressure/flow control (infinitely variable).


Selecting the type of spray

The handgun must be closed.


- Rotate the housing of the nozzle until the desired symbol of the nozzle corresponds with the marking:

- 
 - **High-pressure pencil jet**
for particularly stubborn accumulation of grime.
- 
 - **Low-pressure fan jet**
for operating with detergent or cleaning with negligible pressure.
- 
 - **High-pressure fan jet**
for dirt accumulation over a large surface.

Operating with detergent

 **Caution!** *Unsuitable detergents can harm the cleaner and the object which is to be cleaned. Use only detergents which are released by Kärcher. Proportions of detergent to be used and accompanying instructions should be noted carefully. Use detergents sparingly out of consideration for the environment.*

Kärcher cleaning agents guarantee trouble-free operation. Please seek advice or ask for our catalogue of information sheets on cleaning agents.

- Put the detergent bottle into the bottle holder at the appliance or place detergent can next to the appliance. Two different detergents can be placed in the appliance at the same time.
- Pull out the cleaning agent suction hose and immerse the filter in the cleaning agent canister.
- Screw on the screw cap on the bottle or can.
- Set nozzle to .



Set the detergent dosage valve to the desired detergent and the desired concentration.

Recommended cleaning

methods

- Spray detergent with low pressure jet sparingly over the dry surface to be cleaned and let it take effect but not dry out.
- Spray off (rinse off) the loosened dirt using the high-pressure spray.
- After use immerse filter in clean water. Turn metering valve to maximum cleaning agent concentration setting. Start unit and rinse through for one minute.

Interrupting the operation

- Release lever of the handgun, the unit switches off. Retract lever again and the unit switches on again.

Switching the unit off

- Set unit switch to "0" and pull out power plug.
- Close water inlet.
- Retract lever until the unit is without pressure.
- Actuate the handgun's safety catch to secure the handgun lever from accidentally being triggered.

Transporting the cleaner

- To transport the appliance over long distances use the push handle to pull the appliance.
- When carrying the appliance always use the handle, not the push handle.
- Prior to a transport in the horizontal position remove the detergent bottles from the bottle holder and close them.

Storing the cleaner

- Place the handgun in the support.
- Reel in the high-pressure hose and hang it over the hose rest.

or

- Wind the high-pressure hose on to the hose reel. Push in the crank handle to lock the hose drum.
- Wind the connection cable around the cable holder.
- Fix the plug using the installed clip.

Frost protection



Caution!

Frost will destroy a unit that is not completely empty of water! Store the unit where it will be free of frost.

If storage away from frost is not possible:

- Drain off the water and rinse the unit through with anti-freeze.
- Leave the unit to dry for max. 1 minute.
- Use the standard glycol-based anti-freezes for cars.
- Follow the handling instructions of the anti-freeze manufacturer.

Care and maintenance



Danger!

Before any care and maintenance work on the unit draw out the mains plug.



Caution!

When changing the oil, dispose of any waste oil only at authorised collection points.

Safety inspection/Maintenance contract

You can arrange with your dealer to have a regular safety inspection carried out or to have a maintenance contract. Please seek advice.

Before each use

- Check connecting cable for damage (risk of getting an electric shock), have a damaged connecting cable replaced without delay by authorised Customer Service personnel or an electrician.
- Check high-pressure hose for damage (danger of explosion), replace a damaged high-pressure hose without delay.
- Check unit (pump) for any leaks. Three drops per minute are allowable and can appear on the underside of the unit. Seek the help of Customer Service if leaks are more serious.

Every week

- Check oil level in oil reservoir: if the oil is milky (water in oil), seek the help of Customer Service immediately.
- Clean the strainer in the water connection.
- Clean the filter at the suction hose for detergent.

Annually or after 500 operating hours

- Change the oil
 - For oil quantity and type see Technical Specifications.
 - Undo the fastening screw, remove the hood, remove the oil tank cover, tilt unit.
 - Drain oil into a suitable container.
 - Fill slowly with fresh oil; air bubbles have to escape.
 - Attach the oil tank cover.

Troubleshooting



Danger!

Before any repair work is undertaken, switch the unit off and pull out the power plug. Have electrical components checked and repaired only by authorised Customer Service personnel.

For faults which are not identified in this chap-

ter, or when in doubt or when expressly instructed to do so, consult authorised Customer Service personnel.

Unit does not work

- Check connecting cable for damage.
- Check the mains voltage.
- Consult Customer Service if there is an electrical fault.

Unit does not come up to pressure

- Set nozzle to "high pressure".
- Clean/replace nozzle.
- Evacuate air from the cleaner (see Switching on the unit).
- Clean the strainer in the water connection.
- Check water inlet volume (see Technical Specifications).
- Check all supply lines to the pump for leaks or obstructions.
- Seek the help of Customer Service if necessary.

Pump is leaky

- Three drops per minute are allowable and can appear on the underside of the unit. Seek the help of Customer Service if leaks are more serious.

Pump makes a knocking noise

- Check all supply lines as well as the detergent system for leaks.
- Close the cleaning agent metering valve when running the unit without cleaning agent.
- Evacuate air from the cleaner (see Switching on the unit).
- Seek the help of Customer Service if necessary.

Detergent is not being drawn in

- Set nozzle to "Chem".

- Check detergent suction hose with filter for leaks or obstructions and clean it if necessary.
- Open detergent metering valve or check it for leaks/remove obstruction.
- Seek the help of Customer Service if necessary.

Spare parts

You will find a list of spare parts at the end of these operating instructions.

Warranty

The warranty terms issued by our authorised marketing company are valid in every country. We remedy any fault in the unit free of charge within the warranty period providing the cause of the fault proves to be a material or manufacturing error.

The warranty only becomes operative when your dealer has completed the reply card accompanying the sale of the unit, has stamped and signed it and you have then sent the reply card to the marketing company in your country.

Should you wish to call upon the guarantee, please apply to your dealer or nearest authorised Customer Service centre taking along also the accessories and bill of sale.

EU Declaration of Conformity

We hereby declare that the equipment described below conforms to the relevant fundamental safety and health requirements of the appropriate EU Directives, both in its basic design and construction as well as in the version marketed by us.

This declaration will cease to be valid if any modifications are made to the machine without our express approval.

Product: **High-pressure cleaner**

Type: **1.524-xxx**

Relevant EU Directives:

EU Machinery Directive (98/37/CE)

EU Low-Voltage Equipment Directive (73/23/EEC) amended by 93/68/EEC

EU Directive on Electromagnetic Compatibility (89/336/EEC) as amended by 91/263/EEC, 92/31/EEC, 93/68/EEC, EU Directive on Noise Emissions (2000/14/EU)

Harmonised standards applied:

DIN EN 60 335 - 1

DIN EN 60 335 - 2 - 79

DIN EN 55 014 - 1 : 2000 + A1 : 2001 + A2 : 2002

DIN EN 55 014 - 2 : 1997 + A1 : 2001

DIN EN 61 000 - 3 - 2 : 2000

DIN EN 61 000 - 3 - 3 : 1995 + A1 : 2001 (HD 7/18-4)

DIN EN 61 000 - 3 - 11 : 2001 (HD 6/16-4)

National standards applied: –

Conformity evaluation procedure applied:

Appendix V

Measured sound power level:

HD 6/13-4: 83 dB (A)

HD 7/10-4: 83 dB (A)

Guaranteed sound power level:

HD 6/13-4: 84 dB (A)

HD 7/10-4: 84 dB (A)

i.V. Reiser *Jenner*
S. Reiser H. Jenner

Alfred Kärcher GmbH & Co. KG

Cleaning Systems

D-71349 Winnenden

Alfred Kärcher Kommanditgesellschaft.

Sitz Winnenden;

Registergericht: Waiblingen, HRA 169.

Persönlich haftende Gesellschafterin:

Kärcher Reinigungstechnik GmbH; Sitz Winnenden,

2404 Registergericht Waiblingen, HRB

Geschäftsführer: Dr. Bernhard Graf,

Hartmut Jenner, Georg Metz

Internal measures are taken to ensure that the series units always meet the requirements of the current EC Directives and the standards used.

The persons signing the above declaration act on behalf of and with the authorisation of the management.

Technical Specifications

		HD 6/13-4 M 1.524-103	HD 7/10-4 M 1.524-111
Mains connection		GB	GB
Voltage	V		240
Type of current	Hz		1~50
Rotation speed	1/min		1400
Connected load	kW		3,0
Supply fuse (delayed-action, char. C)	A		13
Extension cable 30 m	mm ²		2,5
Water connection			
Supply temperature max.	°C		60
Supply volume min.	l/h (l/min)	600 (10)	700 (11,7)
Supply hose – minimum length	m		7,5
Supply hose – minimum diameter	Zoll		1
Suction height from an open container 20 °C	m		0,5
Supply pressure max.	MPa		1
Performance data			
Operating pressure	MPa	3 – 13	3 – 10
Max. operating overpressure (safety valve)	MPa	16	13
Flow rate	l/h (l/min)	250 – 600 (4,2 – 10)	300 – 700 (5 – 11,7)
Detergent intake	l/h (l/min)		0 – 40 (0 – 0,7)
Recoil force of the handgun	N		30
Sound emission			
Sound pressure level (EN 60704-1)	dB (A)		69
Garanted sound pressure level (2000/14/EC)	dB (A)		84
Vibrations of unit / total of vibration (ISO 5349)			
Handheld gun	m/s ²		2,0
Spray lance	m/s ²		1,9
Dimensions			
Length	mm		554
Width (MX)	mm		509
Height	mm		1000
Weight without accessories	kg		43
Oil quantity, pump	l		0,5
Oil type, pump		SAE 0W40	

HD 6/13 M HD 7/10 M

